

ABSTRACT OF THE DISCLOSURE

The object of the invention is to efficiently perform indirect index vector reference. An element register of a vector register or a scalar register specified in the "index" is divided into multiple areas, and a particular index vector is acquired by selecting any of the divided areas. Accordingly, it is possible to store substantially multiple index vectors in one vector register, and therefore register resources can be efficiently used. The procedure for providing index vectors is similar to that for providing one index vector, and therefore the code size and the process cycles of the program are almost not increased. That is, according to the present invention, indirect index vector reference can be more efficiently performed.